Parties' Positions

Rhythms opposes SWBT's proposal for a loop qualification process to be used in place of the provision of loop make-up information.[257] Rhythms argues that SWBT's pre-qualification process (red/green/yellow) is based on the acceptability of a loop to SWBT's own retail ADSL services, and may not apply to the services to be provided by CLECs. Rhythms seeks to determine for itself whether a particular loop is capable of supporting xDSL service.[258] Rhythms argues that SWBT should not be permitted to substitute its judgment for that of a CLEC regarding the xDSL loop characteristics.[259]

Covad reiterates its arguments made in DPL Issue Nos. 15 and 17. Covad argues that it should have instantaneous access to the information necessary to determine whether xDSL services can be provisioned across a loop. Covad argues that SWBT should only determine whether a spare pair is available for lease to the CLEC.[260]

SWBT states that its pre-qualification process is entirely optional, and need not be utilized by a CLEC.[261] SWBT also provides "loop qualification" or "loop makeup" information on a manual basis to CLECs upon request for an xDSL loop.[262] SWBT states that it does not know the design parameters of the CLEC service or equipment; therefore, SWBT cannot make a determination of required conditioning of the CLEC service.[263]

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[257] ACI Exhibit 1, Direct Testimony of Eric H. Geis at 36 (Feb. 19, 1999); ACI Exhibit 6, Rebuttal Testimony of Eric Geis at 15-19 (Apr. 8, 1999); ACI Exhibit 7, Rebuttal Testimony of Jo Gentry at 2-5 (Apr. 8, 1999).

[258] ACI Exhibit 2, Direct Testimony of Jo Gentry at 10 (Feb. 19, 1999).

[259] *Id.*

[260] Covad Exhibit 43, Supplemental Direct Testimony of Sandee Turner at 3, 5 (May 24, 1999).

[261] SWBT Exhibit 28, Supplemental Rebuttal Testimony of George R. Phillips, Jr. at 4 (May 28, 1999).

[262] *Id.* at 3.

[263] SWBT Exhibit 26, Supplemental Rebuttal Testimony of William C. Deere at 12 (May 28, 1999).

Award

The Arbitrators find in DPL No. 15 that SWBT's pre-qualification and loop qualification systems as currently described are *not* a reasonable substitute for the provision of actual loop makeup information. To the extent that SWBT's retail operations or separate advanced services affiliate is able to access pre-qualification indicators such as the current red/green/yellow methodology, CLECs should have the same access. However, the indicators and reports obtained thus far from SWBT's pre-qualification and loop qualification programs are based on SWBT's ADSL service offering, and will be of only limited value to the Petitioners. The Arbitrators find that competitive parity can only be reached with respect to loops used to provide xDSL services if CLECs are provided with real-time access to actual loop makeup information that they can then use to provide their services to their customers.

The Arbitrators' finding is consistent with the *UNE Remand Order*. In that Order, the FCC found that :

> "an incumbent LEC should not be permitted to deny a requesting carrier access to loop qualification information for particular customers simply because the incumbent is not providing xDSL or other services from a particular end office. We also agree with commenters that an incumbent must provide access to the underlying loop information and may not filter or digest such information to provide only that information that is useful in the provision of a particular type of xDSL that the incumbent chooses to offer. For example, SBC provides ADSL service to its customers, which has a general limitation of use for loops less than 18,000 feet. In order to determine whether a particular loop is less than 18,000 feet, SBC has developed a database used by its retail representatives that indicates only whether the loop falls into a "green, yellow, or red" category. Under our nondiscrimination requirement, an incumbent LEC can not limit access to loop qualification information to such a "green, yellow, or red" indicator. Instead, the incumbent LEC must provide access to the underlying loop qualification information contained in its engineering records, plant records, and other back office systems so that requesting carriers can make their own judgments about whether those loops are suitable for the services the requesting carriers seek to offer. Otherwise, incumbent LECs would be able to discriminate against other xDSL technologies in favor of their own xDSL technology."[264]

[264] *UNE Remand Order* at ¶ 428.

19(a). Should SWBT be required to deploy a mechanized loop makeup information process for DSL capable loops?

Parties' Positions

Rhythms maintains that it must have access to electronic, automated systems pre-ordering system that allow rapid and efficient access to the technical make-up of a potential customer's loop within six months of the effective date of this arbitrated agreement.[265] Rhythms asserts that SWBT must be required to provide to CLECs access to the same mechanized loop makeup information, or any portion of loop makeup information that becomes mechanized, that SWBT provides to itself in connection with offering its own xDSL retail services.

Covad argues that SWBT maintains databases that contain all of the information necessary to determine whether a loop is capable of transmitting xDSL signals.[266] To achieve true parity, Covad contends, CLECs must have equal, instantaneous access to the same information.[267] Covad asserts that SWBT must provide mechanized access to the loop makeup information.

SWBT states its understanding that it is required to offer parity access to the OSS systems that exist for service ordering and pre-ordering. To the extent SWBT deploys new, mechanized systems that contain loop makeup information, SWBT agrees that it should, and intends to, make that system available to CLECs. SWBT's proposed modifications have been discussed in DPL Issue No. 17.

Award

As discussed in DPL Issue No. 15, the Arbitrators find that SWBT must provide real time, electronic access to all systems needed for efficient provision of advanced services such as xDSL. To the extent SWBT is technically able to access the following in its own operations,

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[265] ACI Exhibit 2, Direct Testimony of Jo Gentry at 10 (Feb. 19, 1999).

[266] Covad Exhibit 43, Supplemental Direct Testimony of Sandee Turner at 8 (May 24, 1999).

[267] Covad Exhibit 45, Supplemental Rebuttal Testimony of Dhruv Khanna at 4 - 5 (May 28, 1999).

SWBT will develop and deploy mechanized and integrated OSS that will permit real-time CLEC access through an electronic gateway to a database that contains the loop makeup information. SWBT should not be allowed to delay the provision of the mechanized loop qualification process for competitors to a date uncertain. The Arbitrators require SWBT to meet the implementation schedule in Section VIII of this Award.

19(b). Until SWBT deploys the mechanized loop makeup information process, what should the process be for a manual process?

Parties' Positions

Rhythms contends that the manual request process should consist of the CLEC submitting requests for loop make-up information via facsimile and SWBT returning the information in the same manner. According to Rhythms witness Ms. Gentry, SWBT currently provides loop make-up information for its own retail operations in three to five days.[268]

Covad maintains that SWBT should be required to develop a mechanized interface for loop makeup information, and does not provide evidence on the manual process.

SWBT states that the centers that handle tariffed ADSL service requirements are required to manually type ADSL service orders.[269] SWBT witness Mr. Deere indicates that when a CLEC requests qualification for an xDSL loop, SWBT manually performs the engineering work to determine the loop makeup and provides the information to the CLEC.[270]

Award

Until a real-time loop makeup database is operational, the Arbitrators find that SWBT shall provide CLECs with manually-derived loop makeup information upon request at no charge.

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[268] ACI Exhibit 2, Direct Testimony of Jo Gentry at 11 (Feb. 19, 1999).

[269] SWBT Exhibit 6, Rebuttal Testimony of Michael C. Auinbauh at 16 (April 8, 1999).

[270] SWBT Exhibit 26, Supplemental Rebuttal Testimony of William C. Deere at 12 (May 28, 1999).

Transmittals and responses between CLECs and SWBT should be by the quickest means practical; facsimile, telephone, or e-mail. As indicated in response to DPL Issue No. 15(a), if a CLEC chooses to employ SWBT's manual pre-qualification system in a central office that has not been inventoried, the interval for CLEC receiving the response should be no longer than 10 business days. If a CLEC elects to have SWBT provide actual loop makeup information through a manual process, then the interval should be established as 3 business days.

20(a). Should the CLEC be allowed to make the business decision as to the need for loop conditioning based on information provided by SWBT?

20(b). Should SWBT be allowed to make all determinations regarding loop conditioning for CLEC needs within its sole discretion?

Parties' Positions

Rhythms reasons that only the particular CLEC knows the parameters of the services it seeks to deploy, and therefore should be able to request the specific type of conditioning required for a particular loop.[271] Rhythms argues that SWBT has the opportunity to see the total outside plant inventory for retail services, thus allowing SWBT the opportunity to find spare or alternative loop facilities that may not need conditioning.[272] Rhythms believes that SWBT should not make business judgements regarding the technical capabilities of CLECs; the CLEC will be in the best position to make decisions regarding conditioning depending on the technology to be used.[273]

Covad asserts, based on the revised contract language proposed by SWBT, that SWBT appears to conceptually agree with this point. Covad maintains, however, that the contract language proposed by SWBT is not acceptable for other reasons. Covad points out that SWBT's

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[271] ACI Exhibit 1, Direct Testimony of Eric H. Geis at 39-40 (Feb. 19, 1999); ACI Exhibit 2, Direct Testimony of Jo Gentry at 18 (Feb. 19, 1999).

[272] ACI Exhibit 2, Direct Testimony of Jo Gentry at 19 (Feb. 19, 1999).

[273] ACI Exhibit 1, Direct Testimony of Eric H. Geis at 39-40 (Feb. 19, 1999).

own retail loop qualification flows automatically into the loop provisioning interval so that SWBT does not suffer the same delays as Covad.[274]

SWBT responds that it has committed to let CLECs make their own business decisions with regard to loop conditioning, consistent with the *Advanced Services Order*.[275] However, SWBT explains that if the CLEC does not request the conditioning suggested by SWBT, then SWBT will not guarantee the service, and performance measures should not apply to that individual xDSL loop.[276] If the CLEC requests SWBT to perform the suggested conditioning, SWBT asserts that it is entitled to cost recovery for the work performed.

Award

Parties reached agreement on this issue during the arbitration proceeding.[277] The Arbitrators agree with the Parties resolution that all conditioning shall be performed at the request of the CLEC.

21. Should SWBT be permitted to limit availability to loops over 17.5k ft only on an ICB basis?

Parties' Positions

Rhythms claims that CLECs can provision viable xDSL services over loops in excess of 17,500 feet and should be permitted to do so at their own service quality risk.[278] Rhythms' witness Geis argues that all loops should be available, regardless of length. Mr. Geis also testified that over 20% of Rhythms' xDSL customers are on loops in excess of 18,000 feet in length.[279] Rhythms testifies that there are generally no differences between analog loops less

[274] Tr. at 1955 (June 5, 1999).

[275] SWBT Exhibit 6, Rebuttal Testimony of Michael C. Auinbauh at 15 (April 8, 1999).

[276] *Id.* at 18.

[277] Covad's Post Hearing Brief at 5 (Aug. 17, 1999).

[278] ACI Exhibit 1, Direct Testimony of Eric H. Geis at (Feb. 19, 1999).

[279] *Id.* at 41.

than or in excess of 17,500 feet in length.[280] Rhythms contends that it is unreasonable to require a competitor to await lengthy ICB (individual case basis) provisioning and pricing decisions from SWBT.[281]

Covad affirms that it offers xDSL services, including IDSL that are provisioned over loops longer than 17,500 feet in length. Covad argues that SWBT should fill xDSL loop orders regardless of loop length and then allow Covad to determine what services can be provided across the loop consistent with other provisions of the Interconnection Agreement.[282]

SWBT's initial proposal was to limit the availability of loops in excess of 17,500 feet in length only on an ICB basis. However, subsequent to its initial filing, SWBT revised its proposal to establish a separate price for each additional work operation required to condition a loop beyond 17,500 feet in length.[283] SWBT does not propose limiting the provision of xDSL loops over 17,500 feet in length.[284]

Award

SWBT states that it will allow CLECs to order loops over 17,500 feet in length without individual case basis (ICB) provisioning and pricing.[285] The Arbitrators find that SWBT should not be permitted to limit availability of xDSL loops in excess of 17,500 feet in length to an ICB basis. When questioned during the hearing, SWBT did not provide a cost basis for choosing 17,500 feet for a cutoff.[286] SWBT witness Deere explained that with some technologies, loops

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[280] Tr. at 1397 (June 4, 1999).

[281] ACI Exhibit 1, Direct Testimony of Eric H. Geis at 41 (Feb. 19, 1999); ACI Exhibit 6, Rebuttal Testimony of Eric Geis at 21 (April 8, 1999).

[282] Covad Exhibit 43, Supplemental Direct Testimony of Sandee Turner at 5-6 (May 24, 1999).

[283] SWBT Exhibit 6, Rebuttal Testimony of Michael C. Auinbauh at 11-12 (April 8, 1999).

[284] *Id.*

[285] SWBT Exhibit 6, Rebuttal Testimony of Michael C. Auinbauh at 11 (April 8, 1999).

[286] *Id.* at 1241.

require repeaters after reaching 18,000 feet in length; in his words, "that's why the distance was kept below that."[287] The Arbitrators note that the Parties agree that "...17.5 is not a magic cutoff where the cost characteristics become radically different...."[288] Loop rates and conditioning charges are addressed in Section VI of this Award.

22. What is the appropriate provisioning interval for 2-Wire xDSL capable loops?

Parties' Positions

Rhythms supports a 7-day provisioning interval for a 2-Wire xDSL loop, or the analogous level at parity with retail xDSL services offered by SWBT, whichever is less.[289]

Covad points out that Pacific Bell, SWBT's affiliate, agreed to provide xDSL loops to Covad within 7 days, if no conditioning is required; within 10 days if conditioning is required; and within 15 days if there are no facilities. Covad argues that SWBT should be held to the same standards. Covad maintains that longer intervals will give SWBT an unfair competitive advantage by allowing SWBT to provide actual xDSL services to its customers before the CLECs can.[290]

SWBT's proposed contract language indicates that the provisioning and installation interval for xDSL loops that do not require conditioning is 5 to 7 business days after the loop qualification process is complete. The specific contract language proposed by SWBT is as follows:

> A. The provisioning and installation interval for an ADSL, 2-Wire or 4-Wire MS Capable Loop or other DSL-Capable loops that are materially the same, as defined above, where no conditioning is requested, will be 5-7 business days after the Loop Qualification process is complete, or the provisioning and installation interval

[287] Tr. at 1243 (June 4, 1999).

[288] *Id.* at 1243, 1403.

[289] ACI Exhibit 2, Direct Testimony of Jo Gentry at 19 – 20 (Feb. 19, 1999).

[290] Covad Exhibit 1, Direct Testimony of Charles A. Haas at 10 (Feb. 19, 1999).

applicable to SWBT's tariffed DSL-based services, whichever is less. The provisioning and installation intervals for the ADSL, 2-Wire or 4-Wire MS Capable Loops where conditioning is requested will be 15 business days for loops up to 17,500 feet, or the provisioning and installation interval applicable to SWBT's tariffed DSL-based services where conditioning is required, whichever is less. An ADSL, 2-Wire or 4-Wire MS Capable Loop in excess of 17,500 feet where conditioning is requested will have a provisioning and installation interval agreed upon by the Parties for each instance of special construction. VLS Capable Loops will be provisioned under the terms of the 2-Wire Digital Loop as described in Appendix UNE of this Agreement.

B. Subsequent to the initial order for an ADSL, 2-Wire or 4-Wire MS Capable Loop or other DSL-Capable loops that are materially the same, as defined above, additional conditioning may be requested on such loop at the rates set forth below and the applicable service order charges will apply; provided, however, when requests to add or modify conditioning are received within 24 hours of the initial order for an ADSL, 2-Wire or 4-Wire MS Capable Loop, no service order charges shall be assessed, but may be due date adjusted as necessary. The provisioning interval for additional requests for conditioning pursuant to this subsection will be the same as set forth above.

SWBT maintains that this schedule is completely at parity with what SWBT is providing for its retail xDSL operations.[291]

Award

The Arbitrators find that the provisioning and installation interval for a xDSL loop, where no conditioning is requested, on orders for 1-20 loops per order or per end-user location, will be 3 - 5 business days, or the provisioning and installation interval applicable to SWBT's tariffed xDSL services, or its affiliate's, whichever is less. The provisioning and installation intervals for xDSL loops where conditioning is requested, on orders for 1-20 loops per order or per end-user customer location, will be 10 business days, or the provisioning and installation interval applicable to SWBT's tariffed xDSL services or its affiliate's xDSL services where conditioning is required, whichever is less. Orders for more than 20 loops per order or per end-user location, where no conditioning is requested, will have a provisioning and installation interval of 15 business days, or as agreed upon by the Parties. Orders for more than 20 loops per order which

[291] SWBT Exhibit 1, Direct Testimony of Michael C. Auinbauh at 15-16 (Feb. 19, 1999).

require conditioning will have a provisioning and installation interval agreed by the Parties in each instance. The Arbitrators find that the provisioning intervals are applicable to every xDSL loop regardless of the loop length.

V. Collocation [292]

DPL Issue Nos. 33-34, 36

33. Should SWBT be required to offer cageless collocation?

Parties reached agreement on this issue in the arbitration proceedings on April 15, 1999.[293]

33(a). Should SWBT be required to provide collocation at a remote terminal site?

Parties reached agreement on this issue in the arbitration proceedings on April 15, 1999.[294]

33(b). Should the interconnection agreement include new collocation provisions that reflect the requirements of the FCC's March 31, 1999 First Order in CC Docket No. 97-147?

Parties reached agreement on this issue in the arbitration proceedings on April 15, 1999.[295]

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[292] The Arbitrators note that subsequent to the Parties' agreement, the Commission approved the revised physical and virtual collocation tariffs of SWBT. These revised tariffs provide the rates, terms and conditions for collocation for providers using Attachment 25 – DSL of the T2A.

[293] Tr. at 467-541 (April 15, 1999).

[294] Tr. at 467-541 (April 15, 1999).

[295] Tr. at 467-541 (April 15, 1999).

34. What is the appropriate provisioning interval for cageless collocation?

Parties reached agreement on this issue in the arbitration proceedings on April 15, 1999.[296]

36. Should SWBT be required to permit collocation of ATM cross-connect equipment?

Parties reached agreement on this issue in the arbitration proceedings on April 15, 1999.[297]

VI. Costs, Rates and Prices

DPL Issue Nos. 26-32

26. Should rates associated with xDSL capable loops be TELRIC-based?

Parties' Positions

Rhythms asserts that the prices for UNEs should be set equal to TELRIC.[298] Rhythms believes that three features of TELRIC are particularly significant in this arbitration:[299] TELRIC is "based on the use of the most efficient telecommunications technology currently available;" a TELRIC study may not consider embedded costs; and unit costs developed consistently with TELRIC must be "divided by a reasonable projection of the sum total number of units of the

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[296] Tr. at 467-541 (April 15, 1999); Provisions are adopted and should be incorporated into the resulting Interconnection Agreements as contained in SWBT Exhibit 6, Rebuttal Testimony of Michael C. Auinbauh at Schedule 1 (April 8, 1999).

[297] Tr. at 467-541 (April 15, 1999); Provisions are adopted and should be incorporated into the resulting Interconnection Agreements as contained in SWBT Exhibit 6, Rebuttal Testimony of Michael C. Auinbauh at Schedule 1 (April 8, 1999).

[298] ACI Exhibit 5, Direct Testimony of Terry L. Murray at 16 (Feb. 19, 1999).

[299] ACI Post Hearing Brief at 100 (Aug. 17, 1999).

element." Rhythms argues that SWBT's cost estimates have violated each of these requirements.[300]

Covad argues that the Commission and the FCC require that SWBT set its prices according to TELRIC principles. Covad believes SWBT's proposed prices do not comply with TELRIC requirements. Covad suggests that SWBT designed its cost studies to support the prices it wants to charge new entrants, rather than deriving its prices from valid cost analysis or using the TELRIC methodology.[301]

SWBT states that all proposed rates are based on TELRIC methodology. SWBT asserts that the cost studies for xDSL loops were the subject of the Mega-Arbitration in which the Commission adopted a TELRIC methodology. SWBT's proposed rates for the xDSL loops are those ordered for UNE loops in the Mega-Arbitration.[302]

Award

The Arbitrators find that, as previously decided by the Commission in other proceedings, all rates associated with UNEs, including xDSL loops, should be TELRIC-based.[303] This finding is consistent with FCC precedent, including the *Local Competition Order*, and FCC UNE Pricing Rules 47 C.F.R. §§ 51.501-515.[304]

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[300] ACI Post Hearing Brief at 101 (Aug. 17, 1999).

[301] Covad Post Hearing Brief at 52-53 (Aug. 17, 1999); *Local Competition Order* at ¶29; Mega Arbitration Award, November 7, 1996 at 25 and December 19, 1997 at 4. The Mega Arbitration consists of Docket Nos. 16189, 16196, 16226, 16285, 16290, 16455, 17065, 17579, 17587, and 17781; ACI Exhibit 5, Direct Testimony of Terry L. Murray at 16 (Feb. 19, 1999); Tr. at 1216-1217 (June 5, 1999).

[302] SWBT Exhibit 8, Rebuttal Testimony of Jerry Fuess at 4 (April 8, 1999).

[303] Mega-Arbitration Award, Nov. 7, 1996 at 25 and Dec. 19, 1997 at 4. (The rates for UNEs on Appendix B are based on the total long run incremental cost (TELRIC)).

[304] *Local Competition Order* at 682; Mega-Arbitration Award, Nov. 7, 1996 at 25 and Dec. 19, 1997 at 4.

27. What are the appropriate TELRIC-based xDSL rates?

Parties' Positions

Rhythms argues that SWBT's proposed rates for xDSL loops are inappropriately high. Rhythms explains that SWBT's proposed rates are higher than the cost based prices, in a absolute sense and relative to the adopted costs for basic analog loops, for any comparable element either proposed by another incumbent local exchange carrier or adopted by another Commission. Rhythms explains that the range of loop rates proposed by SWBT is much larger than in other states. For example, SWBT's proposed digital loop rate is 153% higher than SWBT's proposed analog loop rate. However, Rhythms continues, other states experience increments of 0% to 40%.[305]

Rhythms is particularly concerned with SWBT's proposed rate for digital loops and argues that the incorrect price could result in a price squeeze.[306] Rhythms urges the adoption of a proxy cost for the two-wire digital xDSL loop. Rhythms suggests an interim rate of $20.16. Rhythms contends that the proxy cost should remain in effect until SWBT provides a well documented cost study for two-wire digital xDSL loops, and all affected Parties have had an opportunity to review and comment on the costs.[307]

In regard to analog loops, Rhythms argues that the proxy cost should be the Commission-approved TELRIC-based cost result for the nearest unbundled loop type. Rhythms explains that this interim price would apply until such time as Parties have litigated a specific cost study for xDSL loops.[308]

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[305] ACI Exhibit 5, Direct Testimony of Terry L. Murray at 49-52 (Feb. 19, 1999).

[306] ACI Exhibit 11, Rebuttal Testimony of Terry L. Murray at 11-14 (April 8, 1999); ACI Exhibit 11a, Rebuttal Testimony of Terry L. Murray at 11-17 (April 8, 1999).

[307] ACI Exhibit 5, Direct Testimony of Terry L. Murray at 53 (Feb. 19, 1999); ACI Post Hearing Brief at 117-119 (Aug. 17, 1999).

[308] DPL at 62 (May 28, 1999).

Covad agrees with Rhythms' reasoning.[309] Covad states that SWBT's proposed rates for xDSL loops less than 18,000 feet in length are within an acceptable range. However, Covad argues, SWBT's proposed digital xDSL loop rates are too high. Covad argues that the digital loop rate would prevent the xDSL industry from reaching the industry "price point" of approximately $40-50 per month.[310] Covad concurs with Rhythms' proposal of adopting an interim rate of $20.16 for the two-wire digital xDSL loop.[311]

SWBT proposes xDSL loop rates based on the rates approved in the Mega-Arbitration. SWBT argues that Rhythms and Covad have not contested the recurring loop rates, having stated in the DPL that "until such time as Parties have litigated a specific cost study, the Commission approved TELRIC-based cost result for the nearest unbundled loop type should be used as a proxy."[312]

Award

A cost study to support analog and digital xDSL loop rates was not provided in this proceeding. Instead, SWBT proposed xDSL loop rates that were identical to the UNE loop rates adopted in the Mega-Arbitration. The Arbitrators find that reliance on the Mega-Arbitration UNE loop rates is not appropriate, particularly for digital xDSL loops. As a result, the Arbitrators order SWBT to file a new TELRIC-based cost study for analog and digital xDSL loops. The study should be based on TELRIC principles, designed to create an efficient xDSL network, and compute de-averaged xDSL loop rates. The geographic de-averaging should be consistent with the de-averaging of loop rates in the Mega-Arbitration. The cost study should not distinguish between loop lengths; all xDSL loops should be the same rate regardless of loop length. The Arbitrators invite Rhythms and Covad to file their own cost studies. Until new cost

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[309] *Id.*

[310] Covad Exhibit 1, Direct Testimony of Charles A. Haas at 13 (Feb. 19, 1999).

[311] Covad Post Hearing Brief at 59 (Aug. 17, 1999); ACI Exhibit 5, Direct Testimony of Terry L. Murray at 50-52 (Feb. 19, 1999).

[312] SWBT Exhibit 8, Rebuttal Testimony of Jerry Fuess at 4 (April 8, 1999); SWBT Post Hearing Brief at 66 (Aug. 17, 1999).

studies are approved by the Commission, the Arbitrators find that the interim xDSL loop rates, as described below, will apply.[313]

The underlying loop facility used for xDSL services is equivalent to an analog or digital loop. With regard to analog loops, the Arbitrators find the de-averaged rates adopted for unbundled analog loops in the Mega-Arbitration are appropriate on an interim basis. The Arbitrators find the de-averaged rates to be appropriate, rather than statewide average rates for unbundled loops, because the Commission has implemented the intrastate USF mechanism.[314]

The Arbitrators do not accept the digital loop rates established in the Mega-Arbitration as interim rates for digital xDSL loop rates. It is unclear to the Arbitrators whether the digital loop rates established in the Mega-Arbitration include conditioning costs.[315] This uncertainty could result in over recovery of costs by SWBT, since separate conditioning charges apply to xDSL loops on which the CLEC has requested conditioning.[316] Because the Arbitrators cannot verify whether, and to what extent, the conditioning charges are included in the digital loop rates established by the Mega-Arbitration, the Arbitrators adopt the interim rate proposed by Rhythms and Covad for a 2-wire digital xDSL loop. The Arbitrators double the proposed interim rate for a 2-wire digital loop in order to compute the interim rate for a 4-wire digital xDSL loop.

The Arbitrators find that the appropriate interim rates for analog and digital xDSL loops are the following:

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[313] *See* Implementation Schedule in Section VIII of this Award.

[314] Section 1.5 of Appendix Pricing – UNE to Attachment 6 of the AT&T/SWBT interconnection agreement states:

> Where a statewide average appears on Appendix Pricing UNE Schedule of Prices, that price will prevail until the Commission's implementation of the intrastate USF mechanism scheduled for Spring 1998 or as specified in such other further order of the Commission. Thereafter, pricing will be by Zone where applicable (loops) and by Level, where applicable (ports) as shown on Appendix Pricing UNE - Schedule of Prices.

See Docket No. 18515, Compliance Proceeding for Implementation of the Texas High Cost Universal Service Plan, for implementation of the Texas Universal Service Fund (TUSF).

[315] Mega Arbitration Award, Appendix A, UNE Costing and Pricing DPL Issues Award Table, Issue 148 (Dec. 19, 1997).

[316] *See* DPL at 65 (May 28, 1999).

	Recurring	Nonrecurring	
		Initial	Additional
2-Wire Analog Loop			
Zone 1	$18.98	$15.03	$6.22
Zone 2	$13.65	$15.03	$6.22
Zone 3	$12.14	$15.03	$6.22
2-Wire Digital Loop			
Zone 1	$20.16	$15.03	$6.22
Zone 2	$20.16	$15.03	$6.22
Zone 3	$20.16	$15.03	$6.22
4-Wire Analog Loop			
Zone 1	$36.06	$15.03	$6.22
Zone 2	$21.52	$15.03	$6.22
Zone 3	$15.86	$15.03	$6.22
4-Wire Digital Loop			
Zone 1	$40.32	$15.03	$6.22
Zone 2	$40.32	$15.03	$6.22
Zone 3	$40.32	$15.03	$6.22

One of the conditions in the SBC/Ameritech merger is that SBC/Ameritech will develop and deploy common electronic OSS interfaces across all 13 SBC/Ameritech states to be used by any telecommunications carrier, including the merged firm's advanced services affiliates, for pre-ordering and ordering facilities used to provide advanced services.[317] The FCC found that, "until SBC/Ameritech has developed and deployed the advanced services OSS enhancements, interfaces, and business requirements described above, and the SBC/Ameritech separate advanced services affiliate uses the EDI interface for pre-ordering and ordering a substantial majority of the facilities it uses to provide advanced services, SBC/Ameritech will offer

[317] *SBC/Ameritech Merger Order* at ¶ 371.

telecommunications carriers a 25-percent discount from the recurring and nonrecurring charges for unbundled loops used in the provision of advanced services. This discount is intended to compensate other carriers for the unenhanced OSS and to provide SBC/Ameritech with an incentive to improve the systems and processes as quickly as possible."[318] The Arbitrators find that this same discount shall apply to this Award.

Until such time as permanent xDSL loop rates are approved, SWBT shall offer Petitioners xDSL loops at the interim prices above. The interim xDSL loops rates are subject to refund/surcharge upon approval of permanent xDSL loop rates, back to the date the Interconnection Agreements resulting from this Award become effective.

28(a). Is it appropriate to charge a rate for shielded cross connect that is higher than the rate for unshielded cross connect?

28(b). If so, what are the appropriate rates for xDSL Shielded Cross Connect to Collocation?

Parties' Positions

Rhythms does not anticipate utilizing shielded cross connects.[319] Rhythms asserts that shielded cross connects are not necessary when provisioning xDSL services,[320] and further argues that SWBT's proposed charge for shielded cross-connects should be rejected. Rhythms notes that SWBT's proposed rates for shielded cross connects are significantly higher than those for basic voice-grade cross connects. Rhythms contends that the higher rates represent a barrier to entry.[321] Rhythms believes that SWBT cannot charge differently for the two types of cross connects.[322] Rhythms argues that the difference in the shielded cable cost and labor involved, if

[318] *Id.* at ¶ 372 and Appendix C at ¶ 18.

[319] Tr. at 1320-1321 (June 4, 1999).

[320] *See* ACI Exhibit 5, Direct Testimony of Terry L. Murray (Feb. 19, 1999); ACI Exhibit 3, Direct Testimony of Rand Kennedy (Feb. 19, 1999); ACI Exhibit 4, Direct Testimony of Phil Kyees (Feb. 19, 1999).

[321] ACI Exhibit 6, Rebuttal Testimony of Eric Geis at 27 (April 4, 1999).

[322] ACI Exhibit 6, Rebuttal Testimony of Eric Geis at 27 (April 4, 1999).

any, is minimal.[323] Therefore, Rhythms urges the Arbitrators to find that the costs and rates for shielded and basic voice-grade cross connects are identical.[324] Accordingly, Rhythms proposes that the appropriate rates for shielded cross connects are the rates adopted for voice-grade cross connects in the Mega-Arbitration;[325] $1.24 recurring charge, $4.72 non-recurring charge.[326]

Covad does not anticipate utilizing shielded cross connects. [327] Covad does not believe that shielded cross connects are necessary when provisioning xDSL services.[328] Covad argues that it should not be required to pay the additional cost for shielded cross connects. Instead, Covad believes that SWBT should bear all additional costs for shielded cabling.[329] In the alternative, Covad argues that SWBT's proposed rates for shielded cross connects are unreasonable and should be modified. [330]

SWBT does not require CLECs to utilize shielded cross connects.[331] However, SWBT testifies that a higher rate for shielded cross connects is appropriate in order to compensate SWBT for the additional material and labor costs involved in installing and testing the circuit. SWBT asserts that, unlike a non-shielded cross connect, a shielded cross connect requires a manual test process, must be grounded, and utilizes a dedicated shielded cable. SWBT cites these three differences when justifying its proposed higher cost for shielded cross connects.[332]

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[323] Tr. at 1417-1420 (June 4, 1999).

[324] ACI Exhibit 5, Direct Testimony of Terry L. Murray at 43-44 (Feb. 19, 1999).

[325] ACI Exhibit 5, Direct Testimony of Terry L. Murray at 43 (Feb. 19, 1999).

[326] *Id.* at 44.

[327] Tr. at 1320-1321 (June 4, 1999).

[328] Covad Exhibit 4, Direct Testimony of Anjali Joshi at 16-18 (Feb. 19, 1999).

[329] *Id.* at 18.

[330] *Id.*

[331] DPL at 64 (May 28, 1999).

[332] Tr. at 1324-1326, 1417-1420 (June 4, 1999).

SWBT provided a shielded cross connect cost study.[333] SWBT proposes rates for shielded cross connects: $0.60 recurring charge; $57.75 non-recurring charge.[334] SWBT states that its proposed rates are based on pricing principles established by the Commission in the Second Mega-Arbitration[335] and are not significantly different than non-shielded varieties.[336]

Award

The Arbitrators first note that SWBT has stated that it does not require CLECs to use shielded cross connects when provisioning xDSL services. The Arbitrators agree that SWBT cannot require CLECs to use shielded cross connects when provisioning xDSL services. However, the Arbitrators find that should a CLEC request shielded cross connects, SWBT should be compensated, using TELRIC principles, for the costs associated with provisioning shielded cross connects. The *UNE Remand Order* requires the costs for cross connects to be recovered in accordance with the FCC rules governing the costs of interconnection and unbundling.[337]

The Arbitrators find that in addition to the expenses associated with a non-shielded cross connect, the record supports the additional expenses associated with the material cost of the shielded cable and the labor associated with grounding the shielded cross connect. In order to establish rates for shielded cross connects, the Arbitrators modify the recurring and nonrecurring costs associated with non-shielded cross connects adopted in the Mega-Arbitration. The Arbitrators note that the Mega-Arbitration rates include testing of the non-shielded cross connects. [338] Therefore, the Arbitrators find that since both shielded and non-shielded cross-

[333] SWBT Exhibit 8, Rebuttal Testimony of Jerry Fuess at 4 (April 8, 1999).

[334] SWBT Exhibit 4, Direct Testimony of Barry A. Moore at Schedule 4 (Feb. 19, 1999).

[335] The Second Mega-Arbitration consists of the December 1997 Award in Docket Nos. 16189, 16196, 16226, 16285, 16290, 16455, 17065, 17579, 17587, and 17781.

[336] SWBT Exhibit 2, Direct Testimony of William C. Deere at 22 (Feb. 19, 1999). Rates for (non-shielded) cross connects were established in the Mega-Arbitration.

[337] *UNE Remand Order* at ¶ 178.

[338] The Mega-Arbitration adopted a recurring rate of $1.24 and a non-recurring rate of $4.72 for basic (non-shielded) analog and digital two wire cross connects. The Mega-Arbitration adopted a recurring rate of $2.48

connects must be tested, additional compensation for testing of shielded cross connects is not warranted beyond that already provided in the non-shielded cross connect rates established in the Mega-Arbitration.

To establish the rates for shielded cross connects, the Arbitrators incorporate the additional material costs associated with shielded cross connects into the non-shielded cross connect recurring rate. The Arbitrators find the record supports an additional expense of $35.00 per one hundred feet of 100 pair shielded cable.[339] Therefore, the Arbitrators add $0.35 per shielded 2-wire cross connect and $0.70 per shielded 4-wire cross connect to the non-shielded cross connect recurring rate. In order to calculate the nonrecurring rate for shielded cross connects the Arbitrators incorporate the additional labor expenses into the non-shielded cross connect nonrecurring rate. *See* Attachment B, Paragraph C. After the appropriate recurring and nonrecurring rates for shielded cross connects were determined, a 13.1% Common Cost Allocation Factor was applied.[340] Therefore, the Arbitrators find the following rates to adequately compensate for all costs associated with the provisioning of shielded cross connects.[341]

Shielded Cross Connects

	Recurring	Nonrecurring
2-Wire Analog Shielded Cross Connect	$1.64	$17.29
4-Wire Analog Shielded Cross Connect	$3.28	$42.13
2-Wire Digital Shielded Cross Connect	$1.64	$17.29
4-Wire Digital Shielded Cross Connect	$7.46	$51.62

and a non-recurring rate of $29.56 for basic (non-shielded) analog four wire cross connects and a recurring rate of $6.67 and a non-recurring rate of $39.05 for basic (non shielded) digital four wire cross connects. *See* Mega-Arbitration Award at Appendix B (Dec. 19, 1997).

[339] ACI Exhibit 5, Direct Testimony of Terry L. Murray at 44 (Feb. 19, 1999); ACI Exhibit 5a, Direct Testimony of Terry L. Murray at 45-46 (Feb. 19, 1999).

[340] Because the common cost allocation factor is already included in the rates for (non-shielded) cross connects, the Arbitrators *only* apply the common cost allocation factor to the additional expenses associated with shielded cross connects.

[341] *See* Appendix C for revised cost study.

29. Should SWBT be allowed to charge additional ADSL "Conditioning" charges?

Parties' Positions

Rhythms contends that SWBT should not be allowed to charge additional xDSL conditioning charges.[342] However, Rhythms argues that should the Arbitrators find that conditioning charges are appropriate, SWBT's xDSL conditioning cost studies should be modified to reflect reasonable and efficient costs for xDSL loop conditioning.[343] Rhythms argues that SWBT's study of xDSL conditioning costs is inconsistent with the TELRIC methodology[344] and the recurring cost studies that were adopted in the Mega-Arbitration. Rhythms explains that assuming, as SWBT did, a different network for purposes of calculating recurring and non-recurring costs can result in double counting of costs.[345] More specifically, Rhythms argues that SWBT proposed cost study is incorrect because it does not propose unit costs, calculates costs using inefficient practices, utilizes unsupported task times, and inappropriately bundles the costs for removing and re-installing bridged tap.[346] Rhythms provides adjusted proposed conditioning charges that correct the above concerns with SWBT's proposed cost study.[347]

Covad suggests that SWBT's proposed conditioning charges are nothing more than an anticompetitive barrier to Covad's entry into the xDSL market. Covad concurs with Rhythms

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[342] Rhythms only uses the term "conditioning charges" to simplify the discussion. However, Rhythms feels the term may be misleading as the term has traditionally been used in telecommunications to refer to situations in which equipment must be *added* to a circuit. In contrast, DSL-capable loops require that unnecessary equipment be *removed* from the circuit. *See* ACI Exhibit 5, Direct Testimony of Terry L. Murray at 19 (Feb. 19, 1999).

[343] ACI Exhibit 5, Direct Testimony of Terry L. Murray at 23-36 (Feb. 19, 1999); ACI Exhibit 5a, Direct Testimony of Terry L. Murray at 23-36 (Feb. 19, 1999).

[344] "The assumption of a network in which repeaters, bridged taps, and load coils must be removed from certain loops to make those loops DSL capable is fundamentally incompatible with the least-cost, most efficient technology assumptions of a forward looking economic cost study." *See* ACI Exhibit 5, Direct Testimony of Terry L. Murray at 20-21 (Feb. 19, 1999).

[345] ACI Exhibit 5, Direct Testimony of Terry L. Murray at 20 (Feb. 19, 1999).

[346] *Id.* at 24 - 25; ACI Exhibit 5, Direct Testimony of Terry L. Murray at 24-25 (Feb. 19, 1999).

[347] ACI Post Hearing Brief at 109 (Aug. 17, 1999); ACI Exhibit 5, Direct Testimony of Terry L. Murray at 30-32 (Feb. 19, 1999).

and argues that SWBT's proposed conditioning charges would only add to the customers' costs.[348]

SWBT argues that the need to compensate it for loop conditioning was recognized by the *Local Competition Order*.[349] Nevertheless, SWBT only proposes to charge conditioning charges on xDSL loops greater than 12,000 feet.[350] SWBT concedes that over time, load coils, repeaters, and bridged tap will be slowly migrated out of SWBT's network.[351] Therefore, most loop conditioning will not be necessary in the future. Nevertheless, SWBT explains that some loops in today's network will require conditioning in order to provision xDSL services. SWBT explains that the conditioning activities will be performed by SWBT at the direct request of a CLEC. Therefore, SWBT contends, it should be fairly compensated for the work that it would otherwise not have performed. SWBT supplies a TELRIC-based xDSL conditioning cost study that calculates SWBT's proposed conditioning charges.[352]

Award

The Arbitrators find that SWBT should be fairly compensated for the work it performs when conditioning analog and digital xDSL loops at the request of a CLEC. The Arbitrators also find that SWBT's conditioning charges should be based on forward looking cost principles.

The Arbitrators find that on a forward-looking basis, xDSL loops less than 18,000 feet in length should rarely require conditioning. The Arbitrators believe there is sufficient evidence to support the conclusion that the retention or existence of repeaters or load coils on loops that are less than 18,000 feet in length is not consistent with the TELRIC principles as applied to develop a forward-looking network design. SWBT testifies that the presence of load coils and repeaters

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[348] Covad Exhibit 1, Direct Testimony of Charles A. Haas at 14 (Feb. 19, 1999); Covad Post Hearing Brief, at 57-58 (Aug. 17, 1999).

[349] *Local Competition Order* at ¶ 382.

[350] SWBT Exhibit 8, Rebuttal Testimony of Jerry Fuess at 7-8 (April 8, 1999).

[351] *Id.* at 6.

[352] *Id.* at 4, 6.

will be relatively rare. SWBT asserts that in most cases repeaters will not be on the loop unless ISDN is being provisioned.[353] Moreover, the forward looking cost studies utilized in the Mega-Arbitration did not assume the existence of load coils or repeaters on loops less than 18,000 feet in length; instead loops in excess of 12,000 feet in length were fiber.[354] In addition, SWBT's revised resistance design rules for loop plant only place disturbers on loops at 18,000 feet in length and beyond.[355] The Arbitrators find that on a forward-looking basis, load coils or repeaters should not be present on loops less than 18,000 feet in length. The Arbitrators find that the record suggests that the existence of bridged tap may be included in a forward looking network design.[356] Therefore, the Arbitrators believe that conditioning charges for the removal of repeaters and load coils should only apply to xDSL loops at or beyond 18,000 feet in length. This is 6,000 feet greater than SWBT's proposal to only charge conditioning charges on xDSL loops greater than 12,000 feet in length.[357]

However, the Arbitrators recognize that the FCC has recently found that the incumbent, in this instance SWBT, should be able to charge for conditioning on loops at or less than 18,000 feet in length.[358] Therefore, the Arbitrators find that appropriate TELRIC-based conditioning

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[353] Tr. at 1328 (June 4, 1999).

[354] *Id.* at 1222-1225.

[355] *Id.* at 1229-1230.

[356] Tr. at 1237-1238, 1303-1305, 1328-1329 (June 4, 1999).

[357] SWBT Exhibit 8, Rebuttal Testimony of Jerry Fuess at 7-8 (April 8, 1999).

[358] *UNE Remand Order* at ¶¶ 192-194. The FCC states in paragraphs 193 and 194:

> We agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules, the incumbent should be able to charge for conditioning such loops.
>
> We recognize, however, that the charges incumbent LECs impose to condition loops represent sunk costs to the competitive LEC, and that these costs may constitute a barrier to offering xDSL services. We also recognize that incumbent LECs may have an incentive to inflate the charge for line conditioning by including additional common and overhead costs, as well as profits. We defer to the states to ensure that the costs incumbents impose on competitors for line conditioning are in compliance with our pricing rules for nonrecurring costs.
> (Footnotes omitted.)

charges for the removal of repeaters, bridged taps, and/or load coils shall apply to loops of any length greater than 12,000 feet.

SWBT's proposed conditioning cost study only considers the costs associated with conditioning loops less than 17,500 feet in length. SWBT did not supply any cost information with respect to conditioning loops in excess of 17,500 feet in length.[359] When questioned during the hearing, SWBT did not provide a cost basis for choosing 17,500 feet for a cutoff.[360] However, the Parties agree that "...17.5 is not a magic cutoff where the cost characteristics become radically different...."[361] Rhythms asserts that there are generally no differences between loops less than or in excess of 17,500 feet in length.[362] SWBT witness Deere explained that with some technologies, loops require repeaters after reaching 18,000 feet in length; in his words, "that's why the distance was kept below that."[363]

The Arbitrators acknowledge that the Parties testified that the cost studies utilized in the Mega-Arbitration were completed according to TELRIC principles and designed to create an efficient POTS network.[364] Therefore, the designed network did not normally include load coils or repeaters on loops less than 18,000 feet in length.[365] However, this network design is contrary to the network modeled in SWBT's proposed xDSL non-recurring cost studies for conditioning, which does assume the existence of disturbers on loops less than 18,000 feet in length. The Arbitrators find that the network design inconsistencies in the recurring and non-recurring cost studies do not result in correct xDSL costs and rates and consequently render the proposed charges invalid. Therefore, the Arbitrators order SWBT to file new TELRIC-based cost studies for conditioning of analog and digital xDSL loops at or in excess of 18,000 feet in length. The

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[359] Tr. at 1226 (June 4, 1999).

[360] *Id.* at 1241.

[361] *Id.* at 1243, 1403.

[362] ACI Exhibit 1, Direct Testimony of Eric H. Geis at 41 (Feb. 19, 1999).

[363] Tr. at 1243 (June 4, 1999).

[364] *Id.* at 1222.

[365] *Id.* at 1237, 1303, 1305.